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ABSTRACT OF THE DISCLOSURE

of the early suppression type

A low pressure, ~~early suppression~~ fast response sprinkler includes a generally tubular body having an inlet end, an opposing discharge end and an internal passageway extending between the inlet and discharge ends with a K factor greater than 16 where the K factor equals the flow of water in gallons per minute through the internal passageway divided by the square root of the pressure of water fed into the tubular body in pounds per square inch gauge. A deflector is coupled with the tubular body and spaced from and generally aligned with the discharge end of the internal passageway so as to be impacted by a flow of water issuing in a column from the discharge end upon activation of the sprinkler. The deflector is configured and positioned to deflect the flow of water generally radially outwardly all around the sprinkler. A closure is releasably positioned at the discharge end of the tubular body so as to close the internal passageway by a heat responsive trigger mounted to releasably retain the closure at the discharge end of the tubular body. The trigger has a response time indices (RTI) of less than $100 \text{ meter}^{1/2} \text{ sec}^{1/2}$. A specific pendent sprinkler with a nominal K factor of 25, an RTI of less than $40 \text{ m}^{1/2} \text{ sec}^{1/2}$ and delivering at least 100 gallons per minute at an operating pressure at or below 20 psig is described.